Radiation for lung cancer: not all nodules are created equal

Lung cancer is the leading cause of cancer-related deaths in the US. While surgical resection remains the primary treatment for nodules 5 cm or less, stereotactic body radiation therapy (SBRT) has become an excellent alternative. SBRT allows delivering high doses of radiation precisely to the tumor, while sparing the surrounding healthy tissue. Recently installed Cyber Knife at LCI allows tumor tracking during treatment further sparing normal tissue. In a study recently accepted to the American Society of Radiation Oncology (ASTRO), our affiliate faculty Dr. Rashmi Benda, M.D., and our resident Anatoly Nikolaev, M.D. PhD., looking at the SBRT patients treated at LCI report that not all lung cancer nodules are created equal. As compared to adenocarcinomas of the lung, squamous cell carcinomas require significantly higher doses of targeted radiation to achieve local control rates of 85-90%. This is one of the first published studies reporting on the difference in dose response between the two histologies.